## ITED STATES PATENT AND TRADEMA

OFFICE

PATENT APPLICATION

Inventor(s):

MAX

August 30, 2001

Hon. Commissioner of Patents Washington, D.C. 20231

Appln. No.: 09 Series Code ↑ 941,545

Serial No. ↑

Group Art Unit Examiner:

Atty. Dkt.

Appln. Title:

Date:

1764 (Unknown)

281123

June 17, 2002

M# **Client Ref** 

IMPROVED HYDRATE DESALINATION FOR WATER PURIFICA

Sir:

Filed:

## REPLY/AMENDMENT/LETTER

This is a reply/amendment/letter in the above-identified application and includes the herewith attachment of same date and subject which is incorporated hereinto by reference and the signature below is treated as the signature to the attachment in absence of a signature thereto.

## FEE REQUIREMENTS FOR CLAIMS AS AMENDED

Small Entity claim							
A. \( \sum \) NOT made B. \( \sum \) Withdrawn C. \( \sum \) made herewith D. \( \sum \) made previously \( \sum \) Mot Mithdrawn See Required Separate Paper (Pat-256)	Claims remaining after amendment	Highest number previously paid for		Present Extra	Large/Small Entity	Additional Fee	Fee Code Lg/Sm
2. Total Effective Claims	13	**minus	20	0	x \$18/\$9 =	i + \$0	103/203
3. Independent Claims	3	***minus	3	0	x \$84/\$42 =	+ \$0	102/202
4. If amendment enters <u>proper</u> multiple dependent claim(s) into this application for <u>first</u> time (leave <u>blank</u> if this is a <u>reissue</u> application)						+ \$0	104/204
5. Original due Date:							
6. <b>Petition is hereby made</b> to extend the original due (1 mo) \$110/\$55 = date to cover the date this response is filed for which the requisite fee is attached (3 mos) \$920/\$460 = +5					+ \$0		115/215 116/216 117/217
(Usable <u>only</u> for ≤ 2mo.OA 4 mos) \$1,440/\$720= (Usable <u>only</u> for 30 day/1mo.OA 5 mos) \$1,960/\$980=							118/218 128/228
7. Enter any previous extension fee <u>paid</u> since above <u>original</u> due date and <u>subtract</u> - \$0							· · · · · · · · · · · · · · · · · · ·
8. Extension Fee						+ \$0	
9. If <u>Terminal Disclaimer</u> attached, <u>add</u> Rule 20(d) official fee					+ \$110/\$55	+ \$0	148/248
10. If IDS attached requires Official Fee under Rule 97 (c),					+ \$180 + \$180	+ \$0	126 126
11. After-Final Request Fee per rules 129(a) and 17(r)					+ \$740/370	+ \$0	146/246
12. No. of additional inventions for examination per Rule 129(b)					x \$740/370 ea	+ \$0	149/249
13. Request for Continued Examination (RCE) +						+ \$0	1179/1279
14. Petition fee for						+ \$0	
15. TOTAL FI						\$0	
16. *If the entry in this space is less than entry in next space, the "Present Extra" result is "0".						DI BACE CHARCE	

in this space is less than entry in next space, the "Present Extra" result is "0"

17. \*\*If the "Highest number previously paid for" in this space is less than 20, write "20" in this space.

18. \*\*\*If the "Highest number previously paid for" in this space is less than 3, write "3" in this space.

PLEASE CHARGE OUR DEP. ACCT.

Our Deposit Account No. 03-3975) 281123 (Our Order No. 18984

CHARGE STATEMENT: The Commissioner is hereby authorized to charge any fee specifically authorized hereafter, or any missing or insufficient fee(s) filed, or asserted to be filed, or which should have been filed herewith or concerning any paper filed hereafter, and which may be required under Rules 16-18 (missing or insufficiencies only) now or hereafter relative to this application and the resulting Official Document under Rule 20, or credit any overpayment, to our Accounting/Order Nos. shown above, for which purpose a duplicate copy of this sheet is attached.

This CHARGE STATEMENT does not authorize charge of the issue fee until/unless an issue fee transmittal sheet is filed.

Query: Is appeal deadline now? If so, file Notice of Appeals separately.

Pillsbury Winthrop LLP

Intellectual Property Group

1600 Tysons Boulevard Kenneth M. Fagin By Atty: McLean, VA 22102

Sig:

Reg. No. 37,615

Fax:

(703) 905-2500 (703) 905-2066

Atty/Sec: KMF/emg

Tel: (703) 905-2000

NOTE: File this cover sheet in duplicate with PTO receipt (PAT-103A) and attachments



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

11W.

In re PATENT APPLICATION OF

MAX

Title:

Appln. No.: 09/941,545

Filed: August 30, 2001

June 18, 2002

PRELIMINARY AMENDMENT

IMPROVED HYDRATE DESALINATION FOR WATER PURIFICATION

Hon. Commissioner of Patents Washington, D.C. 20231

RECEIVED JUN 1 8 2002 TC 1700

Group Art Unit: 1764

Examiner: (Unknown)

Sir:

Prior to examination of the patent Application identified above, please amend the claims as follows:

IN THE CLAIMS:

Please cancel claims 3 and 5 without prejudice or disclaimer.

Please enter the following amended claim:

1. (Amended) A method of desalinating or purifying saltwater or otherwise polluted water-to-be-treated via hydrate fractionation, said method comprising:

introducing said water-to-be-treated into a hydrate fractionation column;

injecting a hydrate-forming gas or mixture of gases into said water-to-be-treated under temperature and pressure conditions conducive to the formation of gas hydrate, whereupon said gas or mixture of gases reacts with said water-to-be-treated at a point of hydrate formation to yield gas hydrate and residual fluid while liberating heat of hydrate formation which tends to warm said residual fluid; and

allowing said gas hydrate to rise through said hydrate fractionation column and to enter a hydrate dissociation region in which said gas hydrate dissociates and releases fresh water and said hydrate-forming gas or mixture of gasses;